

---

# Women and Heart Disease Physician Education Initiative

The Heart of Women's Health

---

## Final Report

June 2003



Sponsored by:

The American College of Obstetricians and Gynecologists District II/New York

The New York Chapter of the American College of Physicians

Generously supported by:

New York State Department of Health



Women and Heart Disease  
Physician Education Initiative

---

---

**TABLE OF CONTENTS**

**FORWARD..... 3**

**ACKNOWLEDGEMENTS..... 4**

**EXECUTIVE SUMMARY ..... 5**

**INTRODUCTION ..... 7**

**PROGRAM GOALS AND OBJECTIVES ..... 7**

**PLANNING COMMITTEE ..... 7**

**PHYSICIAN EDUCATION PROGRAM ..... 8**

**PHYSICIAN RESOURCE GUIDE ..... 10**

**DIABETES WORKGROUP ..... 11**

**ADDITIONAL OPPORTUNITIES REALIZED ..... 11**

**PHYSICIAN EDUCATION NEEDS ASSESSMENT AND EVALUATION ..... 13**

**APPENDIX A: PLANNING COMMITTEE**

**APPENDIX B: PHYSICIAN EDUCATION NEEDS ASSESSMENT**

**APPENDIX C: PHYSICIAN EDUCATION PROGRAM**

**APPENDIX D: PHYSICIANS EDUCATED AND GRAND ROUNDS SITES**

**APPENDIX E: PHYSICIAN SURVEY AND HIGHLIGHTS**

**APPENDIX F: DIABETES WORKGROUP & RECOMMENDATIONS**

# Women and Heart Disease Physician Education Initiative

---

## **FORWARD**

The Women and Heart Disease: Physician Education Initiative is a joint project of The American College of Obstetricians and Gynecologists District II/NY (ACOG) and The New York Chapter of the American College of Physicians (NYACP), generously supported by the New York State Department of Health (NYSDOH). This initiative promotes the improved heart health of New York women through the education of primary care physicians about the gender differences inherent in coronary heart disease. Inspired by alarming statistics regarding the growing incidence of female deaths due to heart disease, this initiative focused on risk reduction as the key strategy to prevention. The project encouraged the enlistment of primary care physicians for routine heart disease risk factor screening and counseling of their female patients. The ultimate goal is for women to adopt healthier lifestyles, thereby reducing their risk of developing cardiovascular disease.

This report was compiled by Deborah Elliott, Project Director and Neisha Torres in consultation with Donna M. Williams of ACOG, Linda Lambert of NYACP and the project's planning committee.

# Women and Heart Disease Physician Education Initiative

---

---

## ACKNOWLEDGEMENTS

ACOG and NYACP would like to express deep appreciation to Governor George E. Pataki for his recognition of the growing incidence of heart disease in women and the need for increased physician education and training in this area. Without his vision, support and commitment, this endeavor would not have been possible. In addition, the guidance and support received from Margaret O. Casey, RN, MSN and the staff of NYSDOH was critical to the development of this project.

We want to express thanks to the many experts who shared their vision and knowledge with ACOG and NYACP. Their wisdom and expertise were vital to the success of the project and provided their continued guidance and support to allow the program to evolve. We wish to extend our heartfelt gratitude to the planning committee who provided helpful insight and direction with the development of the physician education curriculum and the physician resource guide. Additionally, we express grateful recognition to the faculty who carried our message through grand rounds presentations to over 2,000 health care professionals throughout New York State including: Janice Barnhart, MD, MS, FACP; Pamela Charney, MD, FACP; Andrew Dunn, MD, FACP; Jan Houghton, MD, FACC; Nicholas Kulbida, MD, FACOG; Vivian Lewis, MD, FACOG; Mark Nelson, MD, MPH, FACC; and Jean-Claude Veille, MD, FACOG.

We would also like to thank the participants of the Diabetes Workgroup, a project subcommittee, who generously gave of their time to establish cardiovascular advisories for physicians caring for women with diabetes and a plan for community referral. Their insight into the special needs of the diabetic woman, who is at greater risk for developing heart disease, enabled the formation of recommendations to NYSDOH.

Finally, a special thanks to Pamela Charney, MD, FACP and Irwin Merkatz, MD, FACOG who co-chaired the project and whose leadership generated much enthusiasm among their colleagues. Their dedication to this subject spearheaded new ideas and inspired insight into future program opportunities.

# Women and Heart Disease Physician Education Initiative

---

## **EXECUTIVE SUMMARY**

This report documents activities of the Women and Heart Disease: Physician Education Initiative from May 1, 2002 to May 30, 2003. The purpose of this project was to educate and train primary care physicians in the gender differences impacting the timely and appropriate detection and management of cardiovascular disease in women.

### ***PLANNING COMMITTEE***

A planning committee comprised of expert physicians representing internal medicine, obstetrics and gynecology, and cardiology, with representatives from the American Heart Association, New York State Nurses Association and NYSDOH guided program development and activities. Planning committee members were selected for their interest and expertise in the area of women's health and heart disease. Key members of the committee were nationally known for their research and publications regarding women and heart disease risk reduction and management.

### ***NEEDS ASSESSMENT***

To aid in program development, a needs assessment was conducted prior to program implementation, to evaluate physician knowledge about heart disease in women and identify topics for the physician education program.

### ***CORE CURRICULUM***

The comprehensive core curriculum that was developed by the planning committee includes the most recent research on gender differences in the incidence of heart disease and misdiagnosis; recommendations for medical management based on national guidelines; and risk reduction strategies for the primary care provider.

Utilizing the core curriculum as a basis for the educational program, 24 Physician Grand Rounds presentations were conducted statewide in various hospital settings. A prestigious faculty, consisting of physicians specializing in areas particular to heart disease in women, delivered an educational program to over 2,000 health care professionals. All regions of the state benefited from this initiative that enlisted primary care physicians to include risk reduction screening and counseling in their everyday assessment of female patients.

### ***PHYSICIAN RESOURCE GUIDE***

A 28-page physician resource guide comprised of national guidelines, links to related web sites, resources, and patient education materials was developed by the planning committee and distributed to 15,000 physicians throughout the state. The guide provides tools and information necessary for primary care physicians to implement gender specific heart disease prevention strategies in their office or clinic setting.

## Women and Heart Disease Physician Education Initiative

---

### ***PHYSICIAN SURVEY***

During the course of the project, a voluntary physician survey was conducted in conjunction with the grand rounds. This survey provided the planning committee with useful information regarding current knowledge level, prevention practice patterns and perceived barriers to implementing prevention strategies. Specific needs of physicians were identified and during ongoing program modifications, incorporated into the curriculum.

This survey indicated that there are definite educational needs for internists and obstetricians and gynecologists regarding gender differences in cardiac disease presentation and management. The survey also supports a need for materials and resources for use by physicians in their office setting to aid in prevention screening and patient education.

### ***DIABETES WORKGROUP***

A subcommittee of experts in women's health, cardiology, and endocrinology established physician advisories for diabetic patients at risk for cardiovascular disease. The subcommittee also developed a community referral plan. Recommendations were made to NYSDOH regarding the special requirements of diabetic women patients for cardiac risk screening and management.

### ***PHYSICIAN DATABASE***

Over 200 physicians statewide volunteered for greater involvement in this initiative and were included in a physician database for future research and programming.

With the support of state legislators and interest from other health care organizations, additional presentations were conducted to raise community awareness of the risks associated with heart disease in women.

# Women and Heart Disease Physician Education Initiative

---

## INTRODUCTION

More women die from cardiovascular disease than from any other cause of death, including all cancers.

Death from heart disease is greater among women than men, suggesting gender specific issues may attribute to this number one killer. According to the 2002 Heart and Stroke Statistical Update by the American Heart Association, New York State ranked the highest in the nation in deaths due to coronary heart disease for both men and women. These alarming statistics suggest aggressive strategies are needed to improve the heart health of women. Reduction in cardiovascular disease risk is the key to prevention and a primary public health objective for New York State.

## PROGRAM GOALS & OBJECTIVES

The Women and Heart Disease: Physician Education Initiative was conceived to increase the number of primary care physicians who screen and counsel female patients on the risks of heart disease. Specifically, the objectives of the project were to:

1. Educate 2,000 physicians statewide in gender specific heart disease diagnosis and management;
2. Develop and disseminate educational materials and resources to 15,000 physicians for use in screening, management and patient teaching about heart disease in the office or clinic setting;
3. Provide recommendations to NYSDOH regarding heart disease medical management guidelines for the patient with diabetes, and suggest a plan to assist physicians with the appropriate referral of patients to services in the community.

## PLANNING COMMITTEE

In May 2002, a planning committee of experts in the areas of obstetrics and gynecology, internal medicine and cardiology convened and became the cornerstone of all project planning and direction. Committee members included practicing physicians and academicians engaged in research, all knowledgeable in the specific health needs of women. Many members were nationally recognized experts with numerous publications on female cardiovascular issues. In addition to physician participation, the committee was represented by the New York State Nurses Association, the American Heart Association and NYSDOH.

After a thorough review of the current literature and a series of discussions, the committee determined the need to:

- ♥ Conduct a knowledge based needs assessment of primary care physicians regarding gender specific heart disease issues.
- ♥ Develop key components for the physician education curriculum using current literature and data gathered from the knowledge based needs assessment.
- ♥ Develop a physician survey to obtain aggregate data about current knowledge, risk reduction practice patterns and perceived barriers to implementing prevention strategies to be distributed at the grounds.
- ♥ Compile and develop tools and resources for inclusion in a resource guide for primary care physicians.

# Women and Heart Disease Physician Education Initiative

---

## PHYSICIAN EDUCATION PROGRAM

Current practice issues, effective management strategies and recommended guidelines were identified through a comprehensive review of the literature. Utilizing a focus group survey method, preliminary educational needs of physician were identified.

### ***EDUCATIONAL NEEDS ASSESSMENT***

An informal survey of primary care physicians in private or clinic practice, academic, teaching and community hospital settings, yielded the need for:

1. Clinical presentation of cardiac disease in women and how it differs from men.
2. Recommendations for hypertension management in women.
3. Management of cardiac risks specific to diabetic women.

### ***CORE CURRICULUM***

The curriculum is a comprehensive education program to instruct physicians on the most recent research on gender differences in the incidence of heart disease and misdiagnosis; recommendations for medical management based on national guidelines; and risk reduction strategies for the primary care provider.

A consensus-building model was used in the development of the core curriculum. The content reflects the expertise of the planning committee. This approach provided an opportunity for all stakeholders to comment, thus enabling development of a comprehensive system to educate primary care physicians on cardiac gender differences.

The planning committee determined topics for inclusion in the core curriculum. The core curriculum included:

1. Gender specific differences in presentation, diagnosis and management of heart disease in women.
2. Perceptions of physicians and women regarding the risk of heart disease.
3. Education on the major heart disease risk factors affecting women:
  - ♥ Tobacco use
  - ♥ Physical inactivity
  - ♥ Obesity
  - ♥ Elevated cholesterol
  - ♥ Hypertension
  - ♥ Type 2 Diabetes
4. Recommended strategies for risk reduction and management based on national guidelines.
5. The role of primary care physicians in risk reduction.
6. The role of hormone replacement therapy in heart disease risk and prevention.
7. Barriers to lifestyle change, including stages of change theory.

# Women and Heart Disease Physician Education Initiative

---

## **GRAND ROUNDS**

At the initiation of the project, sixteen hospitals were identified to host a grand. Selection of sites was based on demographic and geographic factors to allow the broadest reach possible and included academic/teaching facilities and community hospitals.

By project end, a total of 24 sites were visited, including a presentation to a managed care organization.

The grand rounds program included a 60-minute power point presentation and discussion, eligible for continuing medical education credit. Over 2,000 healthcare professionals were educated including obstetrician and gynecologists, internists, residents, medical students and nurses. Requests were received for future medical education in the areas of hormone replacement therapy, management of lipids and hypertension in the female patient and implementation of prevention strategies in the practice setting.

## **FACULTY**

Faculty for the grand rounds presentation represented ob-gyns, internists and cardiologists, selected for their prior lecture experience and specific clinical expertise. For example, one faculty member was an investigator for the National Institutes of Health Women's Health Initiative and had extensive experience with hormone replacement therapy research. Another faculty member was the director for the Women's Healthy Heart Initiative in New York's Capital Region and had educated physicians about cardiac management of women for several years. Several faculty members had participated in research studies specifically involving women and had academic positions at prestigious medical schools. Others were in private practice with extensive understanding and experience with female needs.

The diverse faculty enabled this initiative to accommodate curriculum preferences of interdisciplinary audiences throughout the state.

The core curriculum created the base of the educational program and was often expanded by each individual faculty to reflect their expertise. One faculty member presented the impact of coronary vessel remodeling and the risk of non-symptomatic disease progression based on his cardiology experience. Another faculty member reported research on polycystic ovary disease and its relationship to cardiac risks in women. At another presentation discussion on maternal high cholesterol and its relationship to fetal well being occurred.

# Women and Heart Disease Physician Education Initiative

---

## PHYSICIANS RESOURCE GUIDE

A resource guide was developed to provide practicing physicians tools and resources to implement or enhance risk reduction strategies and patient teaching in the office setting. The 28-page resource guide, a comprehensive, reproducible handbook combines national guidelines and medical management recommendations with office-based tools and patient education materials. The guide was distributed statewide to 15,000 physicians who are members of ACOG and NYACP in July 2003.

### ***RESOURCE GUIDE CONTENTS***

- ♥ National guidelines for hypertension control and cholesterol management;
- ♥ Dietary and physical activity recommendations;
- ♥ BMI chart;
- ♥ Smoking cessation guidelines;
- ♥ Stages of change theory to assist in motivating behavior modification;
- ♥ Community resources for weight management and smoking cessation;
- ♥ Links to related web sites;
- ♥ Heart disease risk factor tracking form for physician office use;
- ♥ Heart disease self-assessment form for patient use;
- ♥ Patient education fact sheets on related risk reduction and prevention recommendations.

# Women and Heart Disease Physician Education Initiative

---

## DIABETES WORKGROUP

The special needs of diabetic women with heart disease risk were considered by a project subcommittee and resulted in medical management and community referral plan recommendations to NYSDOH.

### ***SUBCOMMITTEE***

Eight professionals representing the medical community, the American Diabetes Association, NYSDOH and the planning committee convened to consider the special needs of diabetic women with or at risk for heart disease.

### ***CARDIAC ADVISORIES FOR WOMEN WITH DIABETES***

Current guidelines and research on cardiac disease risk reduction in the diabetic patient were reviewed to develop advisories for the primary care physician to guide assessment and medical management, including:

- ♥ Blood pressure control
- ♥ Cholesterol management
- ♥ Glucose control
- ♥ Weight management
- ♥ Hormone replacement therapy
- ♥ Aspirin use
- ♥ Tobacco use

### ***COMMUNITY REFERRAL PLAN***

Diabetic patients are at greater risk for developing cardiovascular disease and need to be counseled regarding their risk at an early age. Programs such as tobacco cessation, nutritional counseling, and weight management are among the services required for the diabetic patient. Research shows that patients who access community resources are apt to be more compliant with self-management and treatment plans. The subcommittee identified a need for increased physician awareness and better access to

information to overcome barriers to timely and appropriate referrals.

In order for physicians to appropriately refer patients, they need to know what services are available and how patients can access appropriate services. In addition, they need to know what services are covered by insurance plans. At the present time there is not a consistent, convenient mechanism to access such information. Time constraints limit physicians and their staff from accessing necessary community resources. A resource that combines all necessary services and programs into well-organized format would promote ease of access and could increase compliance with referrals. Therefore, the subcommittee formulated the following recommendations:

1. Commence a thorough statewide assessment of currently available resources.
2. Compile a comprehensive directory of applicable programs and services arranged geographically by county.
3. Arrange for the directory to be accessible in both paper format and on NYSDOH web site.

# Women and Heart Disease Physician Education Initiative

---

## **ADDITIONAL OPPORTUNITIES REALIZED**

Opportunities to increase awareness of women's heart health beyond the physician community arose during the course of the project. This initiative was expanded for consumers and other health care professionals enabling the message to be spread to other interested parties directly involved in women's health.

### ***WOMEN'S HEALTH FORUMS***

Public forums designed for the consumer addressed issues of heart disease risk reduction in the New York Legislative Office Building in Albany. Sponsored by female members of the legislature, the programs, specifically designed for women, were presented by physician project faculty. These female legislators, heart attack survivors and proponents of work-to-wellness programs, saw the value of the initiative and the need to help bring the message to a broader audience.

### ***WOMEN'S HEALTH EXPO 2003***

The Annual Women's Health Expo, visited by approximately 10,000 women over a two-day period, was held at the Empire State Plaza in Albany. Initiative staff provided information about heart disease, weight management, hypertension and cholesterol management. Hormone replacement therapy and smoking cessation materials were distributed. Heart health risk assessments were provided for women of all ages by registered nurses. This self-assessment gave women the opportunity to evaluate their risk of heart disease and allowed confidential consultation with health professionals. A slide presentation depicting issues pertinent to women's cardiac health was continuously displayed throughout the expo.

### ***ALBANY MEDICAL CENTER ANNUAL TEACHING DAYS 2003***

The Project Director, a registered nurse, presented a keynote address on *Issues in Women's Cardiovascular Health* to an audience of over 200 nurses. The presentation identified the nurse's role in risk reduction and raising the awareness of the gender differences inherent in heart disease presentation, screening and management. The event was sponsored by the Albany Medical Center's Department of Education and Development and was designed for nurses currently working in the field of women's health.

### ***PHYSICIAN DATABASE***

Over 200 physicians from across the state volunteered to partner with their colleagues in this initiative and become part of a database for future women and heart disease research and programming. Volunteers included physicians in private practice, physicians involved in academic or teaching environments, and residents of internal medicine and ob-gyn.

### ***ALLIANCES FORGED***

Several national and statewide organizations, including the American Heart Association, WomenHeart, Health Plan of New York, HealthNow, the Alliance for the Aging, and other industry partners expressed interest in the project and provoked discussions regarding potential partnering opportunities. Several institutions and regions of the state, including Buffalo and Syracuse, are actively pursuing avenues to address the issue of women and heart disease and are reviewing this project as a model for physician education activities.

# Women and Heart Disease Physician Education Initiative

---

## PHYSICIAN EDUCATION NEEDS ASSESSMENT & EVALUATION

In addition to the preliminary focus group survey conducted prior to the implementation of the educational component of the project, physician participants voluntarily completed a survey at the conclusion of the grand rounds presentation. This survey enabled the planning committee to assess educational needs, modify curriculum components, understand differences in knowledge and practice between specialties, and direct future programming. Specifically, the survey assessed the following:

- ♥ Barriers to implementing prevention strategies into current practice.
- ♥ Baseline knowledge of primary care physicians regarding gender specific issues of heart disease presentation, prevention and management.
- ♥ Current practice patterns of physicians in prevention and screening for heart disease risk factors.
- ♥ Comparative data based on gender, age and specialty of participating physicians.

### ***SURVEY RESULTS***

The survey was completed by 689 physicians, primarily between the ages of 30 to 50 years of age (60%). There was an equal distribution of males and females, with a higher representation of internal medicine physicians. Twenty-seven percent of the physicians represented other specialties, including cardiology, family practice, and endocrinology. Table 1 provides a detailed description of the respondent characteristics.

Table 1. Respondent characteristics (N=689)

<i>Categories</i>	<i>n (%)</i>
Gender (n=650)	
Female	284 (44)
Male	366 (56)
Specialty Practice (N=689)	
Internal Medicine	352 (51)
Ob-gyn	152 (22)
Other	185 (27)

Physicians considered time, interest by patients, training, and reimbursement as areas that impede their ability to include prevention strategies in their practice. Overall, the respondents agreed that all the areas, previously mentioned, did impact the implementation of prevention strategies with time perceived as the biggest barrier.

## Women and Heart Disease Physician Education Initiative

---

Using information obtained from nine multiple choice and four true/false questions regarding basic knowledge in female cardiovascular issues, the following areas of educational deficiency<sup>1</sup> were identified:

- ♥ Smoking is the leading cause of acute myocardial infarction in women under 50 years of age (30 percent answered incorrectly);
- ♥ Body Mass Index range increases a woman's relative risk of CHD two-fold (40 percent answered incorrectly);
- ♥ Optimal LDL cholesterol level as defined by ATP III guidelines (40 percent answered incorrectly);
- ♥ High risk HDL cholesterol level as defined by ATP III guidelines (40 percent answered incorrectly).

Survey information also indicated:

- ♥ Over 60% of both specialties begin screening female patients before the age of 40.
- ♥ More internists prescribe nicotine replacement therapy than do ob/gyn physicians, however, more ob/gyn physicians refer patients to community services for smoking cessation.
- ♥ 77% of both specialties provide dietary or exercise advice to overweight patients, however, only 30% of physicians refer patients to community services for obesity.
- ♥ Cholesterol management and correlation of BMI (Body Mass Index) to relative risk of cardiovascular death topped the areas of knowledge deficit consistently across both specialties.
- ♥ Tobacco use and its relationship to myocardial infarction in women under 50 years of age were also identified as an educational need.
- ♥ A majority of respondents identified patient information/handouts and guidelines for medical management as the top two items most useful in implementing risk reduction strategies in the office setting.

Detailed information on the survey results appears in Appendix E.

### ***RELEVANCE TO PROJECT OBJECTIVES***

The primary goal of the Women and Heart Disease: Physician Education Initiative was to increase the number of primary care physicians who talk to their female patients about heart disease risk prevention.

This survey indicated that there are ongoing educational needs of internists and obstetrician/gynecologists regarding gender differences in cardiac disease presentation and management. As depicted in Graph 1, highlights of the survey results were consistent with areas of identified educational need by the planning committee. The survey also supports a need for materials and resources for use by physicians in the office setting to aid in prevention screening and patient education. The content included in the Physician Resource Guide meets the need for materials and resources identified by the survey (see Graph 1 and 2).

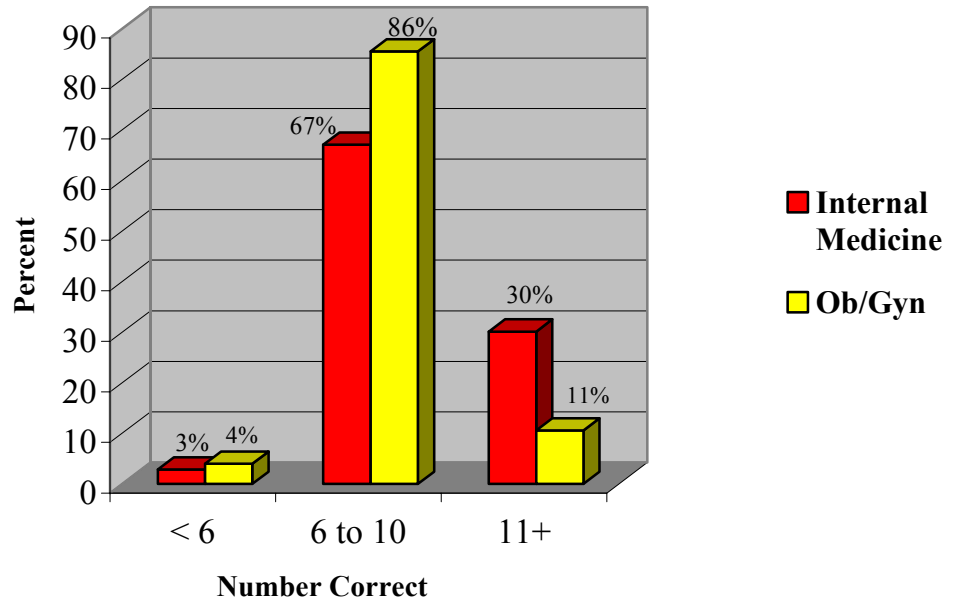
---

<sup>1</sup> Educational deficiency was defined as items answered correctly less than 80 percent of the time.

---

# Women and Heart Disease Physician Education Initiative

**Graph 1.**  
TOTAL NUMBER OF CORRECTLY ANSWERED QUESTIONS BY SPECIALTY



**Graph 2.**  
WHAT WOULD BE MOST USEFUL IN HELPING YOUR PATIENTS REDUCE THEIR RISK OF HEART DISEASE  
(PERCENTAGE OF DOCTORS IN EACH GROUP WHO SELECTED THE GIVEN PREFERENCE)

